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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/256,702	02/24/1999	RANJAN J. MATHEW	NSCIP127/NSP	1148
22434	7590	12/02/2004	EXAMINER	
BEYER WEAVER & THOMAS LLP			NGUYEN, DUNG T	
P.O. BOX 778				
BERKELEY, CA 94704-0778			ART UNIT	PAPER NUMBER
			2871	

DATE MAILED: 12/02/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

09/256,702

Applicant(s)

MATHEW ET AL.

Examiner

Dung Nguyen

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 03 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 22 August 2001.
- 2a) ☒ This action is FINAL. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-21 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-21 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

### DETAILED ACTION

Applicants' amendment dated 08/22/2001 has been received and entered. By the amendment, claims 1-21 are remain pending in the application.

#### *Claim Rejections - 35 USC § 103*

1. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.
2. Claims 1-21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nagata et al., US Patent No. 5,880,795, in view of Miyamoto et al., US Patent No. 5,587,817.

Regarding claims 1-5, 7-14 and 19-21, Nagata et al., figure 3, disclose a liquid crystal display (LCD) device comprising:

- a containment structure (57) as claimed
- a liquid crystal display (LCD) cell including a die (52) having a pixel array (52a), a transparent plate (51) and a liquid crystal material (53);
- an adhesive seal (54);
- a support material (36).

Nagata et al. do not disclose a plurality of spaced apart stabilizers to couple edge portions of the LCD cell. Miyamoto et al. do disclose a plurality of bars (8) couple to edge portions of an LCD cell. Therefore, it would have been obvious to one skill in the art at the time of the invention was made to couple bars to edge portions of an LCD cell as shown by Miyamoto et al. in order to support for an LCD cell (1) from the substrate (2) (col. 3, ln. 16).

Regarding claim 6, the modification to Nagata et al. device discloses the claimed invention as described above except for the Alloy Ash 42 based material for the substrate of the

containment structure. It would have been obvious to one having ordinary skill in the art at to use the Alloy Ash 42 as a containment substrate material since it has been held to be within the general skill of a worker in the art to select a known material on the basis of its suitability for the intended use as a matter of obvious design choice. *In re Leshin*, 125 USPQ 416.

Regarding claims 15-18, the modification to Nagata et al. device discloses the claimed invention as described above except for wire bonding a plurality of leads from the die to a plurality of leads on the containment structure and an encapsulating material over the plurality of leads. One of ordinary skill in the art would have realized the desire to form a plurality of wire to connect from a plurality of leads on the die to a plurality of leads on the containment structure as well as to cover such wire by an encapsulating material as shown in Applicants' admitted prior art (figure 3). Therefore, it would have been obvious to one of ordinary skill in the art to form a connection between a plurality of leads on the die substrate and the containment structure and cover such connection thereon, since it is a common practice in the art to complete an LCD device by connecting an LCD cell to an external circuit.

### ***Response to Arguments***

3. Applicant's arguments filed 08/22/2001 have been fully considered but they are not persuasive.

Applicants contend that the cited references, alone or in combination, fail to teach or remotely suggest "a plurality of spaced apart stabilizers arranged to couple edge portions of the liquid crystal cell to the containment structure without adhering the bottom surface of the liquid crystal cell to the bottom surface of the containment structure" as recited in independent claim 1. In addition, the cited references fail to teach or remotely suggest "forming a plurality of spaced

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apart stabilizers arranged to couple an edge portion of the liquid crystal cell to the containment structure without adhering the bottom surface of the liquid crystal cell to the bottom surface of the containment structure" as recited in independent claim 14, since, as asserted by Applicants, the rigid bars 8 of Miyamoto are actually part of the fixing tool 7 and used to temporarily support and position a liquid crystal panel onto a fixing plate 2; and such fixing tool is re-used for another liquid crystal unit (amendment, pages 5-6). The Examiner is not convinced by this argument since the same is true of the Miyamoto et al. rigid bars. The Examiner agrees that the rigid bars 8 is a part of a fixing tool 7; however, nowhere does disclose such rigid bars remove afterall. A fixing tool helps to align an LCD over a fixing plate ; thus a LCD panel unit is produced (see col. 3, lines 21-43). Therefore, the spaced apart stabilizers and the rigid bars would be the same as well. In addition, regarding claim 14, since the method of manufacturing the device is merely a list of forming each component and each component must be formed to make the device, the method of manufacturing would be inherent to the device.

Accordingly, the rejection of claims 1-21 stand.

### ***Conclusion***

4. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period

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will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dung Nguyen whose telephone number is 571-272-2297. The examiner can normally be reached on Monday-Thursday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Robert H. Kim can be reached on 571-272-2293. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

DN  
11/29/2004



**Dung Nguyen**  
**Primary Examiner**  
**Art Unit 2871**